
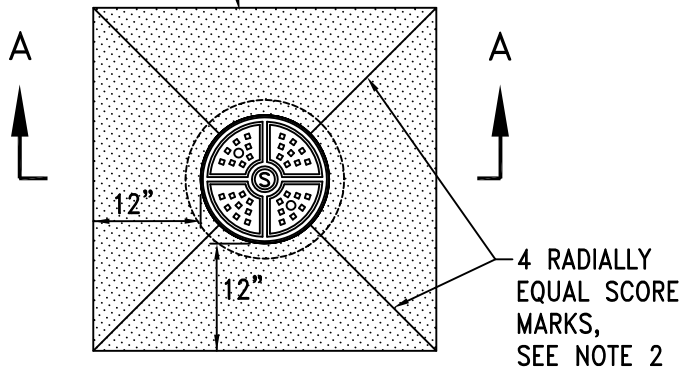


NOTE:
FOR CONSTRUCTION DETAILS SEE SUBSECTION 3.3.3(D)(i).

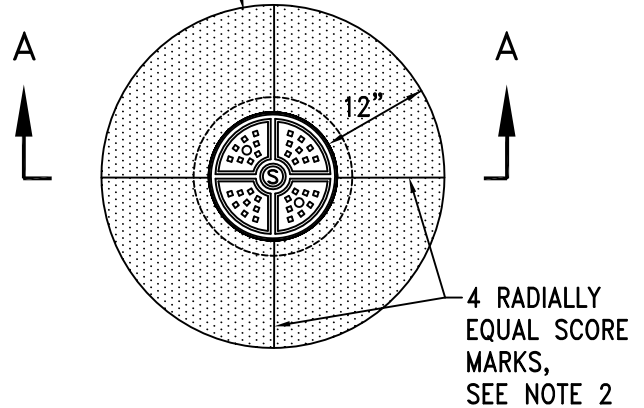
ISSUED:	STANDARD DETAIL		DETAIL NO.
8/92 (WWM-307)	FLOW CHANNEL COVER		RWRD 306
REVISED:			SHEET 1 OF 1
12/12			

CLASS 'S' CONCRETE
(3,000 PSI),
SEE NOTE 1

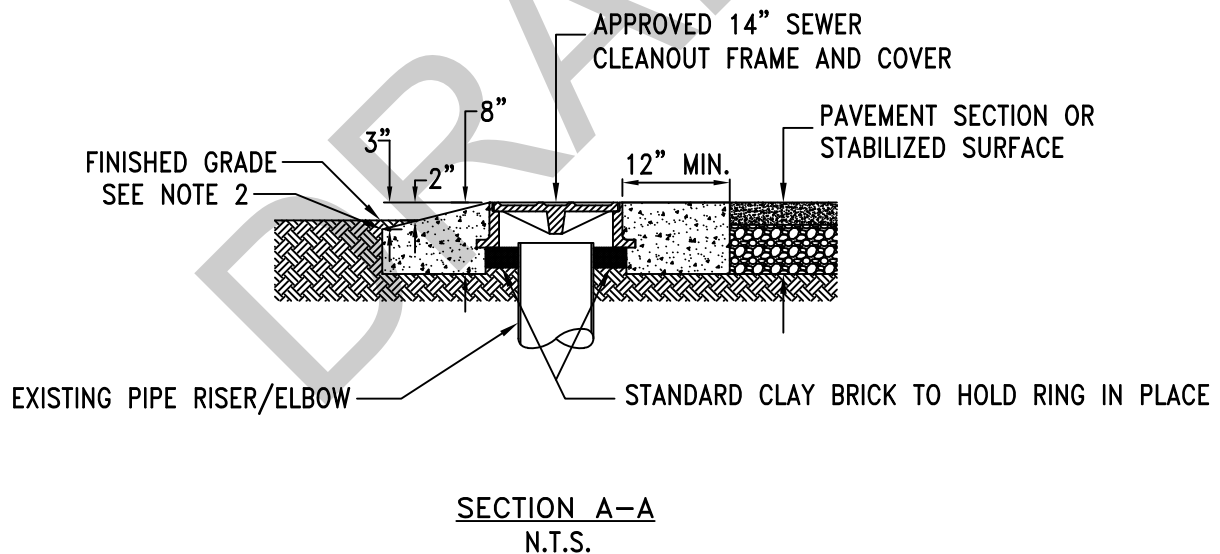


PLAN VIEW
SQUARE COLLAR
(UNPAVED AREAS)
N.T.S.

CLASS 'S' CONCRETE
(3,000 PSI),
SEE NOTE 1




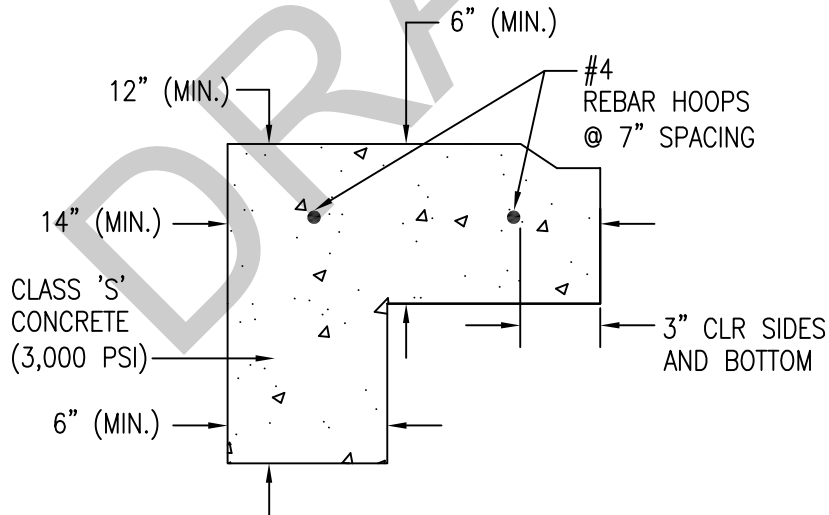
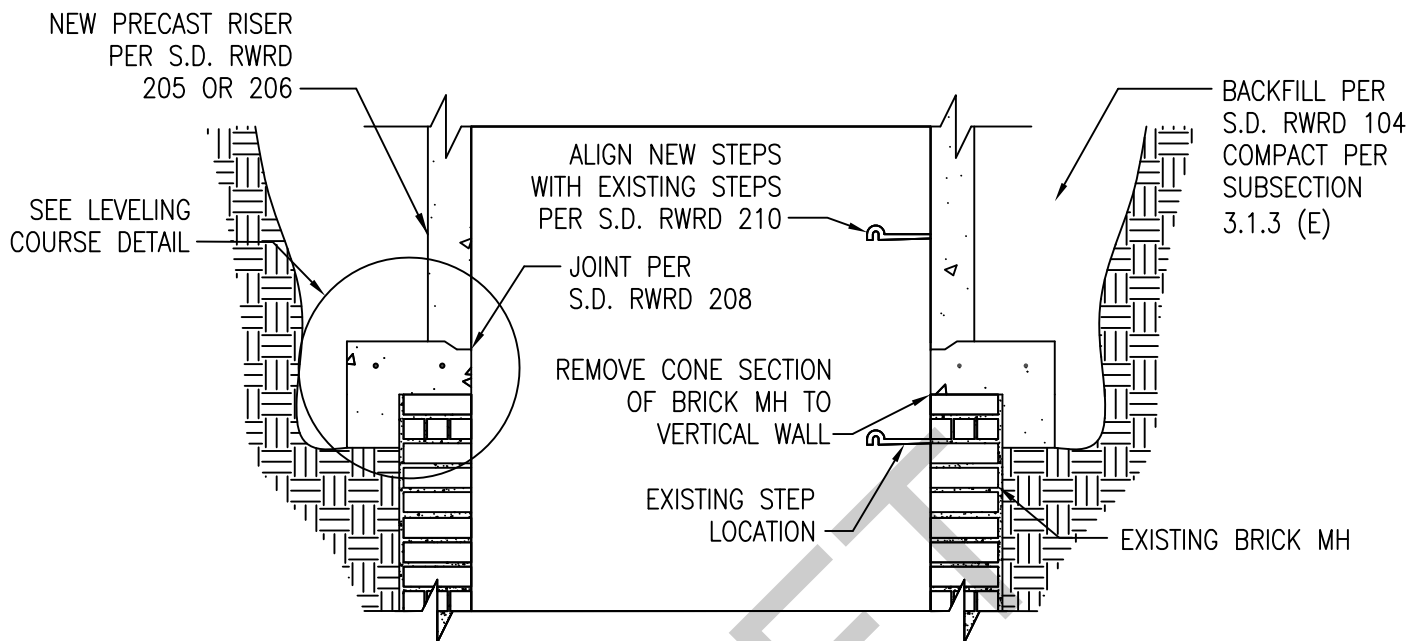
PLAN VIEW
ROUND COLLAR
(PAVED AREAS)
N.T.S.




NOTES:

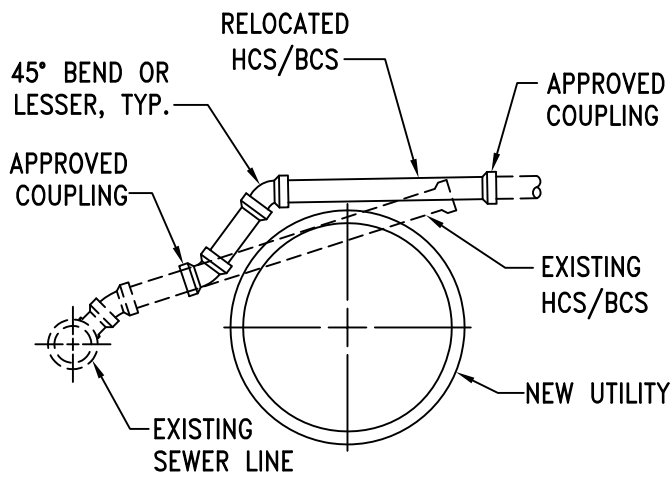
1. ALL COLLARS SHALL BE FORMED.
2. FINISH ALL CONCRETE EDGES AND SCORE MARKS WITH A HAND TROWEL HAVING A 1/4" RADIUS. EXPOSED CONCRETE SURFACES SHALL HAVE A MEDIUM BROOM FINISH.

ISSUED:	STANDARD DETAIL GRADE ADJUSTMENT FOR EXISTING CLEANOUTS		DETAIL NO.
10/15			RWRD 307
REVISED:			SHEET 1 OF 1

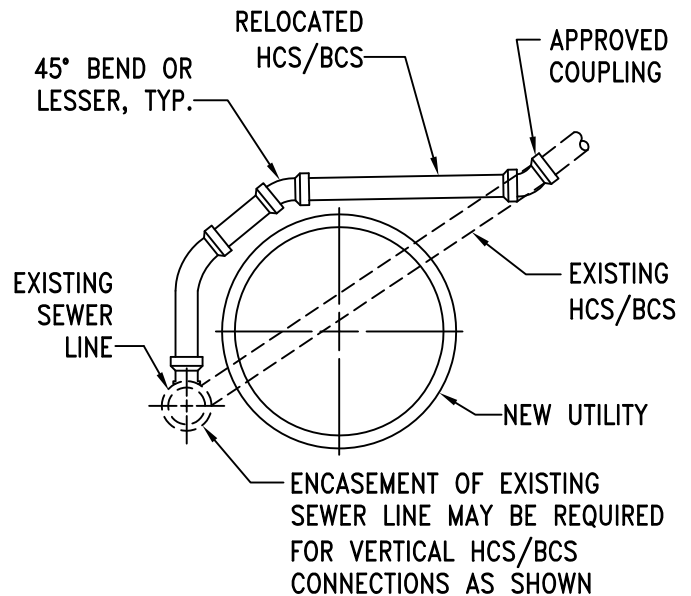


LEVELING COURSE DETAIL
N.T.S.

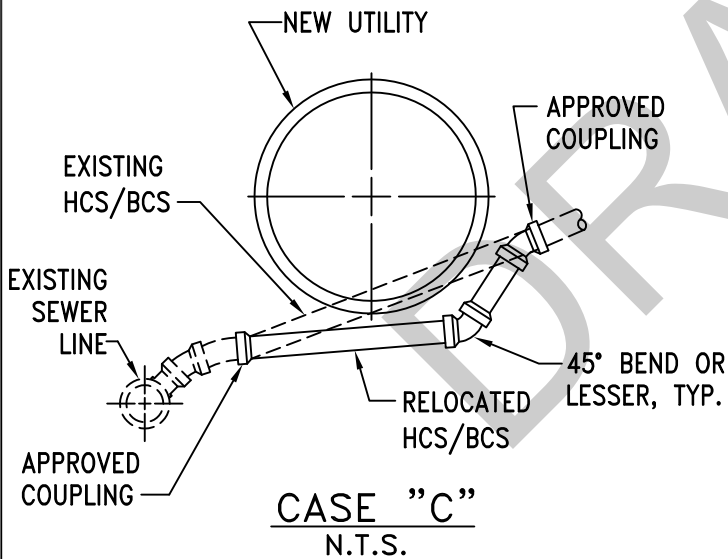
ISSUED:	STANDARD DETAIL		DETAIL NO.
10/15	LEVELING COURSE FOR		RWRD 308
REVISED:	BRICK MH RECONSTRUCTION		SHEET 1 OF 1



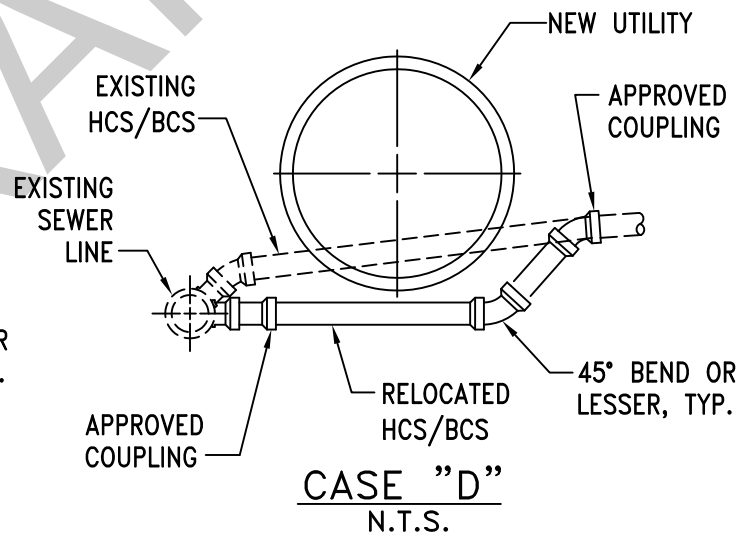
CASE "A"
N.T.S.



CASE "B"
N.T.S.



CASE "C"
N.T.S.



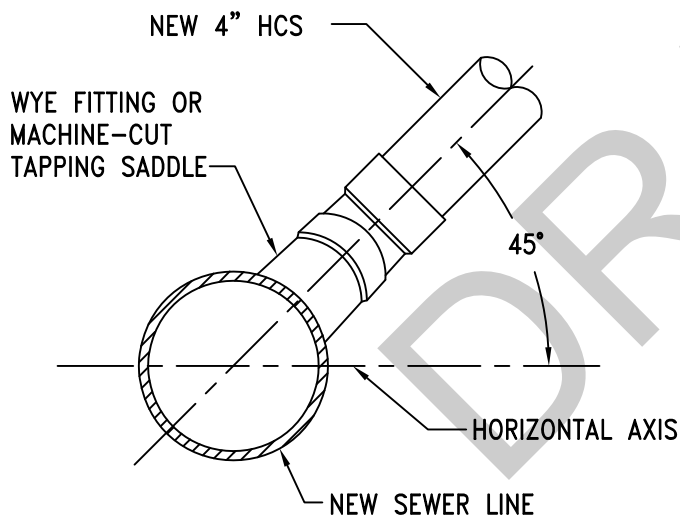
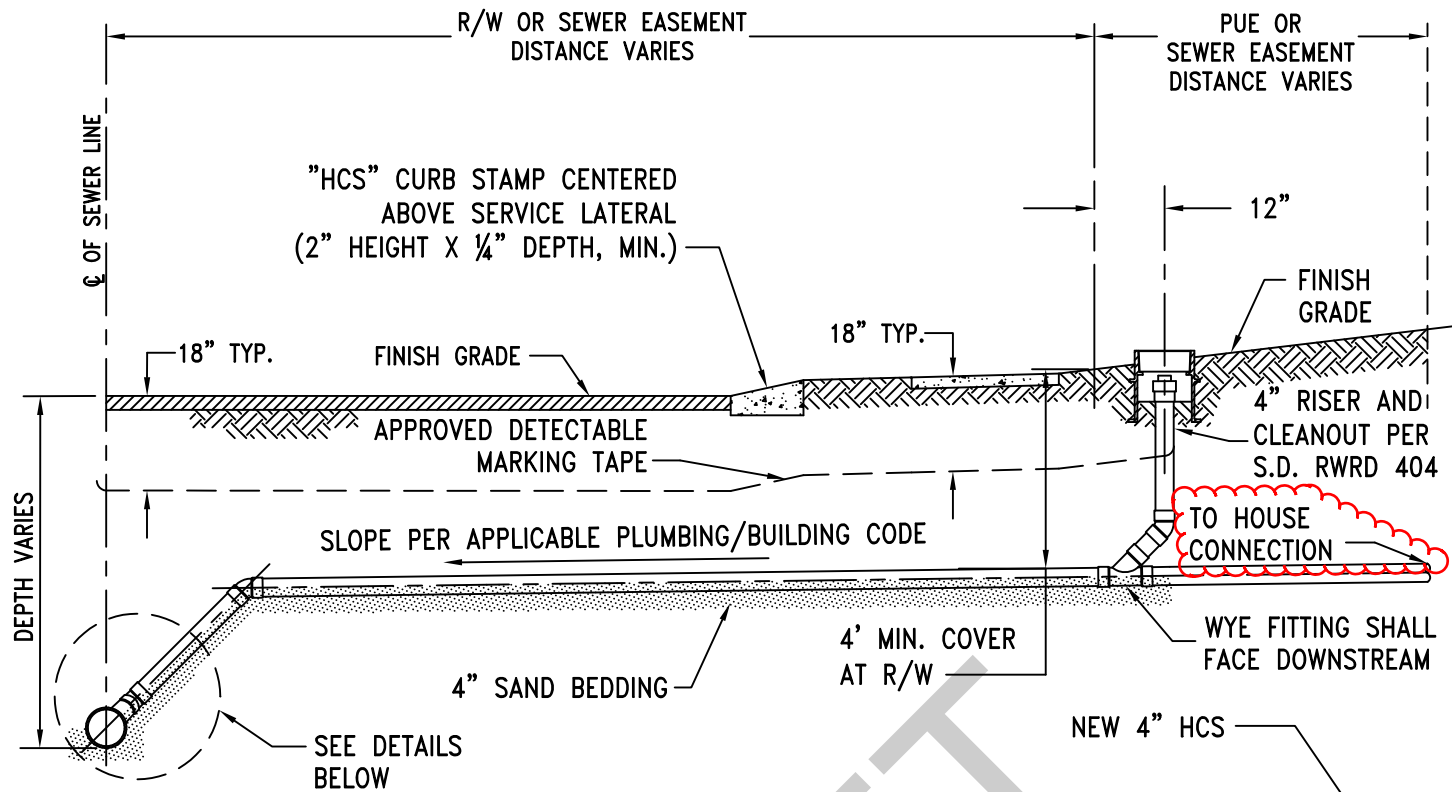
CASE "D"
N.T.S.

NOTES:

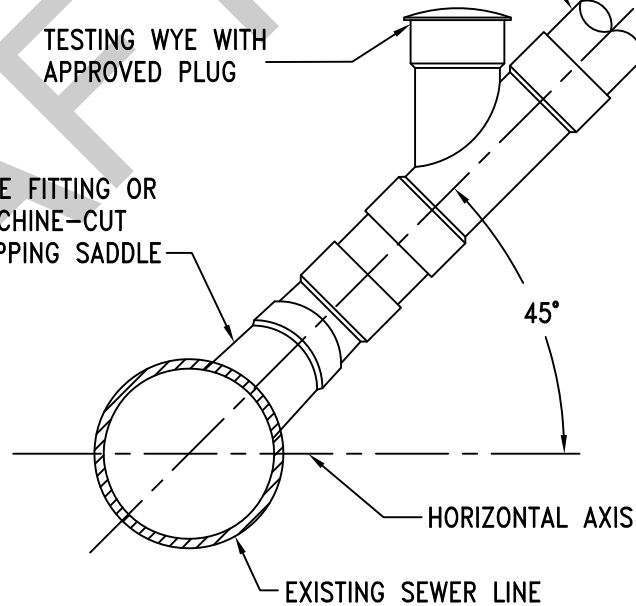
1. THE MATERIAL OF THE RELOCATED SERVICE LATERAL (HCS/BCS) SHALL BE PVC EXCEPT WHERE THERE IS LESS THAN 12" OF CLEARANCE BETWEEN THE NEW UTILITY OR LESS THAN 3' OF COVER TO FINISHED GRADE. IN SUCH CASES, THE PIPE MATERIAL LOCATED WITHIN THE RIGHT OF WAY, SHALL BE DIP.
2. USE OF CASE "D" TYPE REROUTING DEPENDS ON THE LEVEL OF FLOW (PRESENT AND FUTURE) WITHIN PUBLIC SEWER AND IS SUBJECT TO CASE-BY-CASE APPROVAL BY THE FIELD ENGINEER.
3. THE MINIMUM SLOPE ON ANY REROUTED SERVICE LATERAL SHALL BE 1.00%.

ISSUED:	STANDARD DETAIL		DETAIL NO.
8/92 (WWM-404)	HCS REROUTING		RWRD 400
REVISED:			SHEET 1 OF 1
12/12			






**HCS CONNECTION TO
NEW SEWER LINE**
N.T.S.

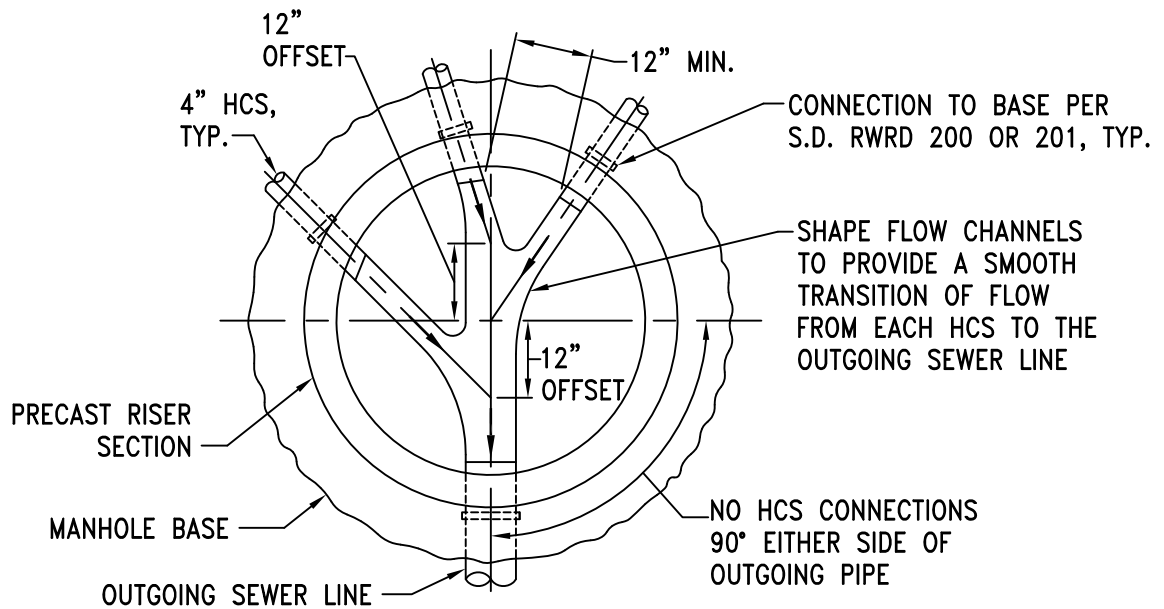


**HCS CONNECTION TO
EXISTING SEWER LINE**
N.T.S.

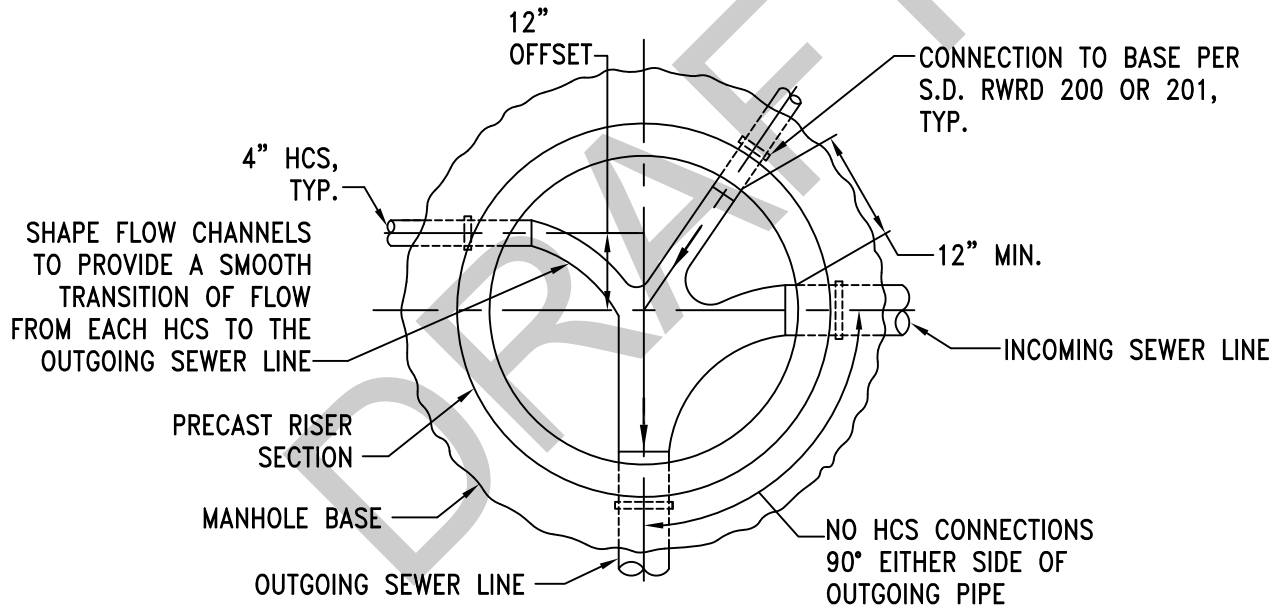
NOTE:

INSTALLATION OF FITTINGS AND TAPPING SADDLES SHALL CONFORM TO THE PIPE MANUFACTURER'S RECOMMENDATIONS AND SUBSECTION 3.2.3(C).

ISSUED:	STANDARD DETAIL		DETAIL NO.
8/92	HCS CONNECTION TO SEWER LINE		RWRD 401
REVISED:			SHEET 1 OF 1
10/15			




PLAN VIEW
(TERMINAL MANHOLE IN CUL-DE-SAC)
N.T.S.



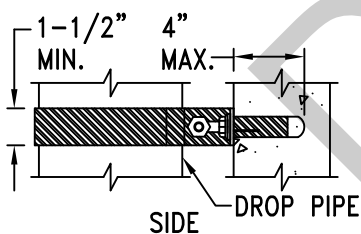
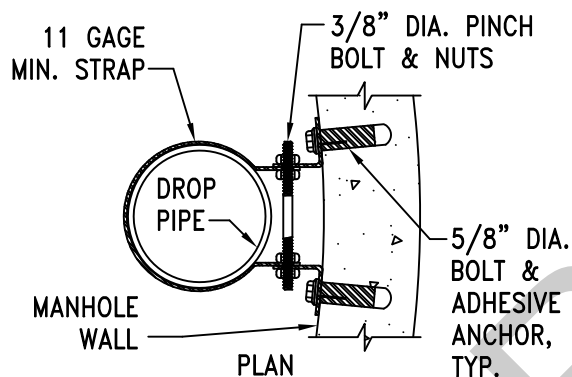
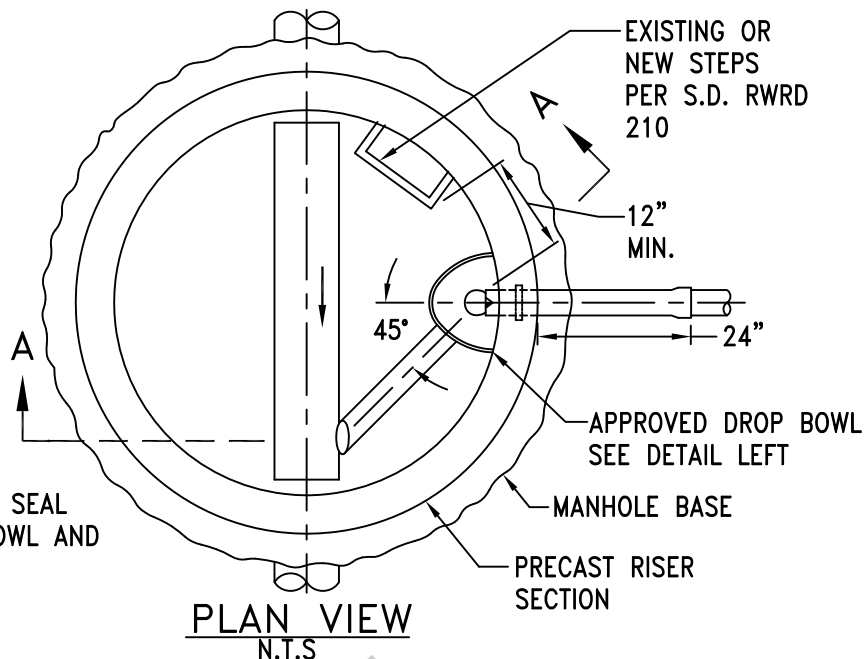
PLAN VIEW
(90° MANHOLE IN KNUCKLE INTERSECTION)
N.T.S.

NOTES:

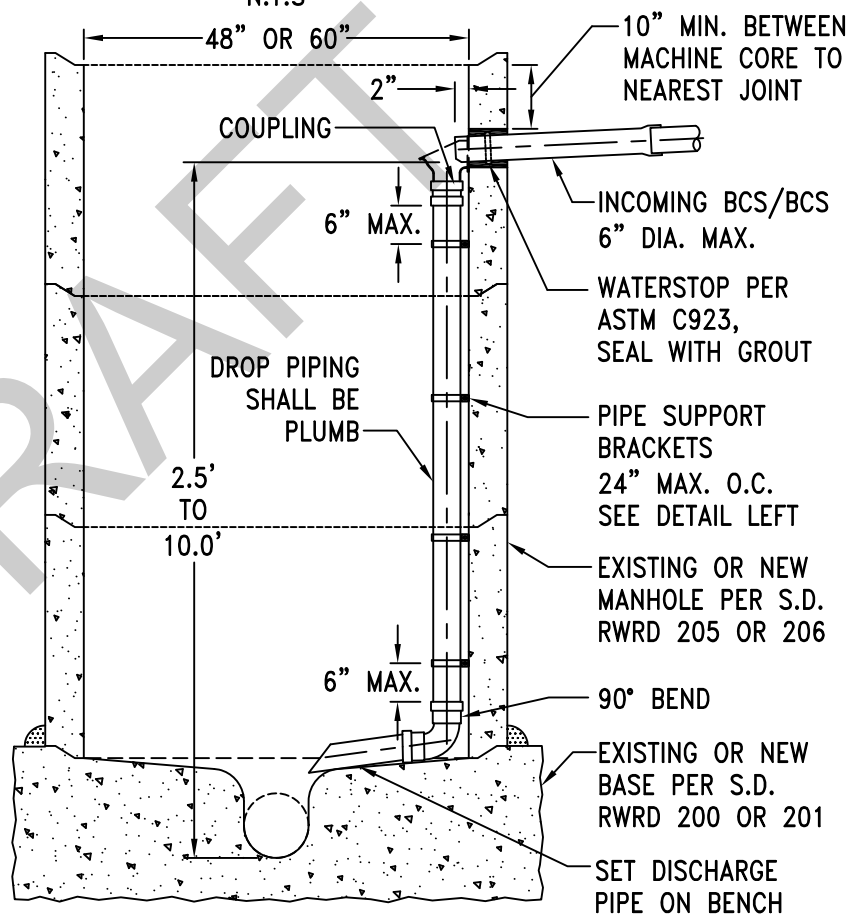
1. THIS SPECIAL STANDARD DETAIL MAY BE USED BY THE CONTRACTOR IF APPROVED IN THE PLANS OR IN WRITING BY THE FIELD ENGINEER.
2. THE CONNECTION OF 4" DIAMETER HOUSE CONNECTION SEWERS (HCS) INTO MANHOLES SHALL BE AVOIDED EXCEPT WHERE INDICATED ON THE PLANS OR AS APPROVED BY THE FIELD ENGINEER.
3. THE CROWN ELEVATION OF EACH HCS SHALL MATCH THE CROWN ELEVATION OF THE OUTGOING SEWER LINE.

ISSUED:	SPECIAL STANDARD DETAIL		DETAIL NO.
8/92	HCS CONNECTIONS TO MANHOLES		RWRD 402
REVISED:			
12/12			

BOWL FRONT VIEW
N.T.S



BRACKET DETAIL
N.T.S

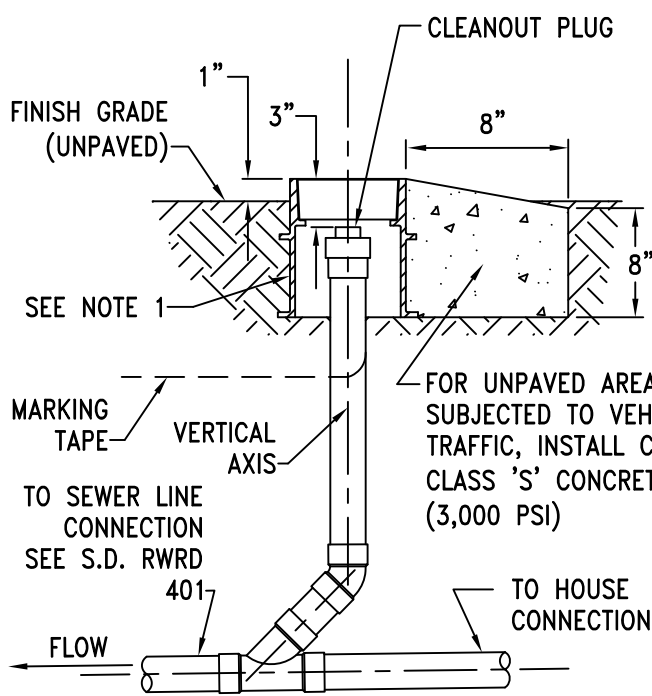


SECTION A-A
N.T.S.

NOTES:

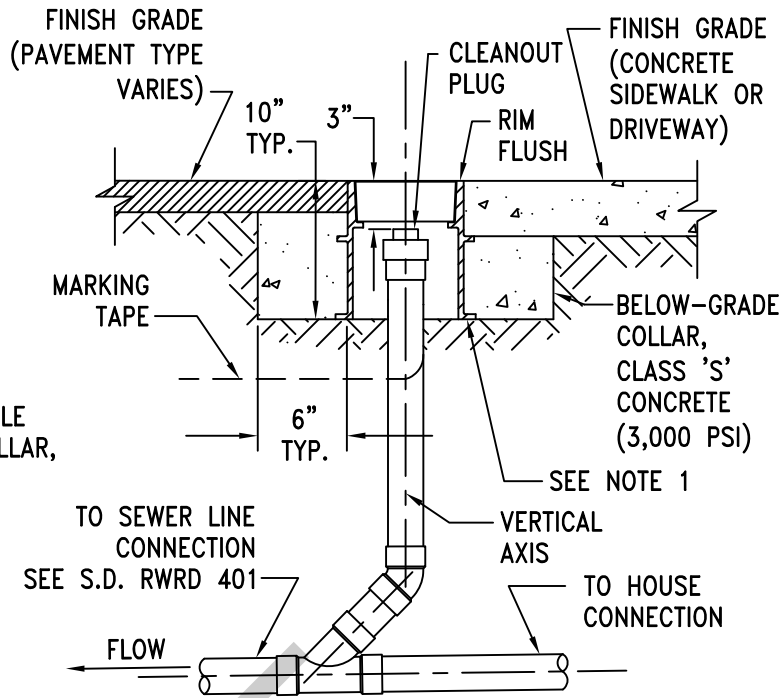
1. THIS SPECIAL STANDARD DETAIL MAY BE USED BY THE CONTRACTOR IF APPROVED IN THE PLANS OR IN WRITING BY THE FIELD ENGINEER. DETAIL LIMITED TO SERVICE LATERALS SEE SUBSECTION 5.3.3 & 5.2.15 FOR MORE INFO.
2. DROP PIPING MATERIALS SHALL BE PVC (SDR-26) WITH GLUE FITTINGS AND THE SAME DIAMETER AS THE INCOMING HCS OR BCS. ALL HARDWARE SHALL BE TYPE 316 STAINLESS STEEL UNLESS OTHERWISE APPROVED BY THE FIELD ENGINEER.

ISSUED:	SPECIAL STANDARD DETAIL	 PIMA COUNTY WASTEWATER RECLAMATION	DETAIL NO.
12/12	HCS INTERNAL DROP MANHOLE CONNECTION		RWRD 403
REVISED:			SHEET 1 OF 1
10/15			



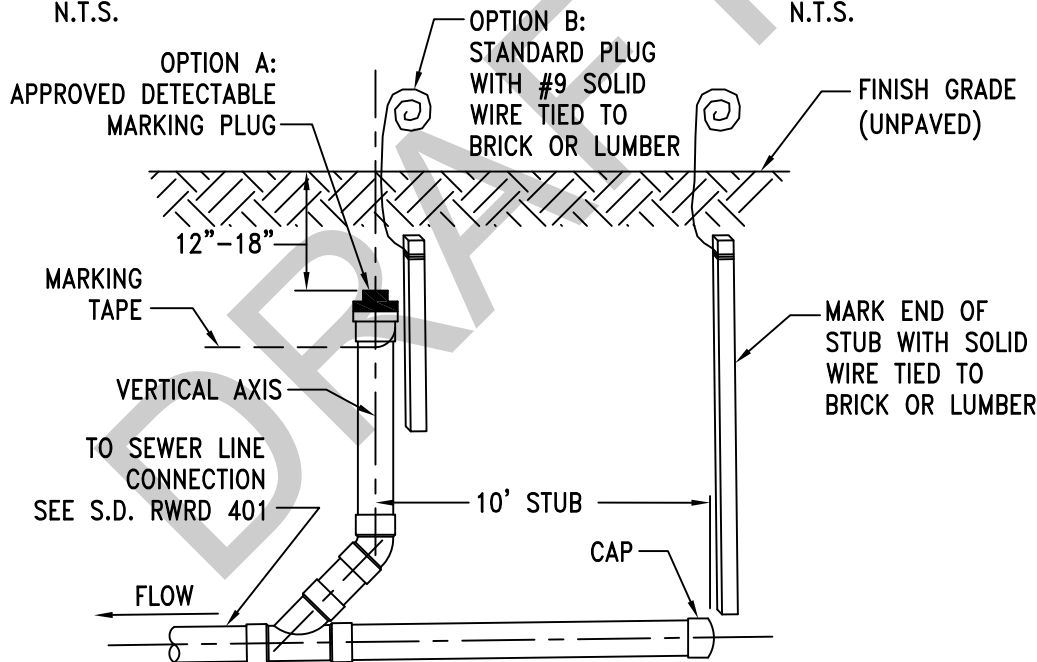
TYPE I

FINAL INSTALLATION FOR DEVELOPED LOTS IN UNPAVED AREAS
N.T.S.



TYPE II

FINAL INSTALLATION IN PAVED AREAS
N.T.S.




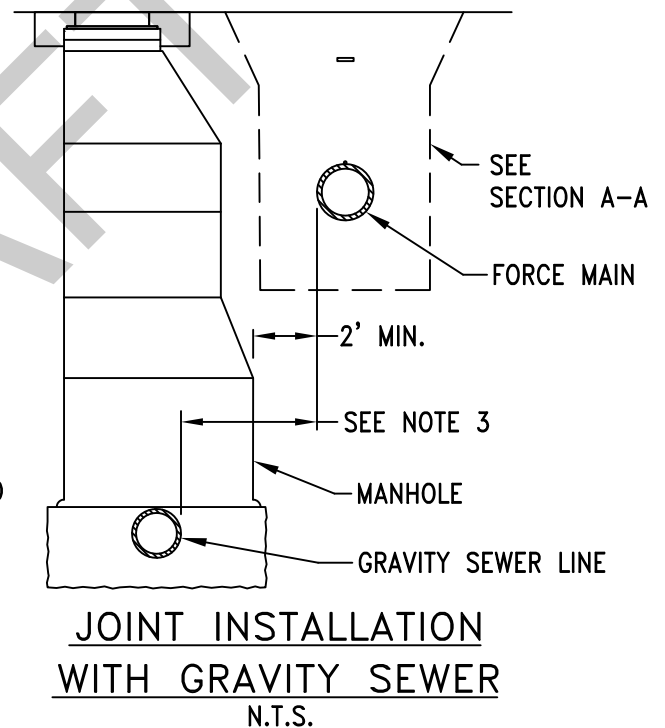
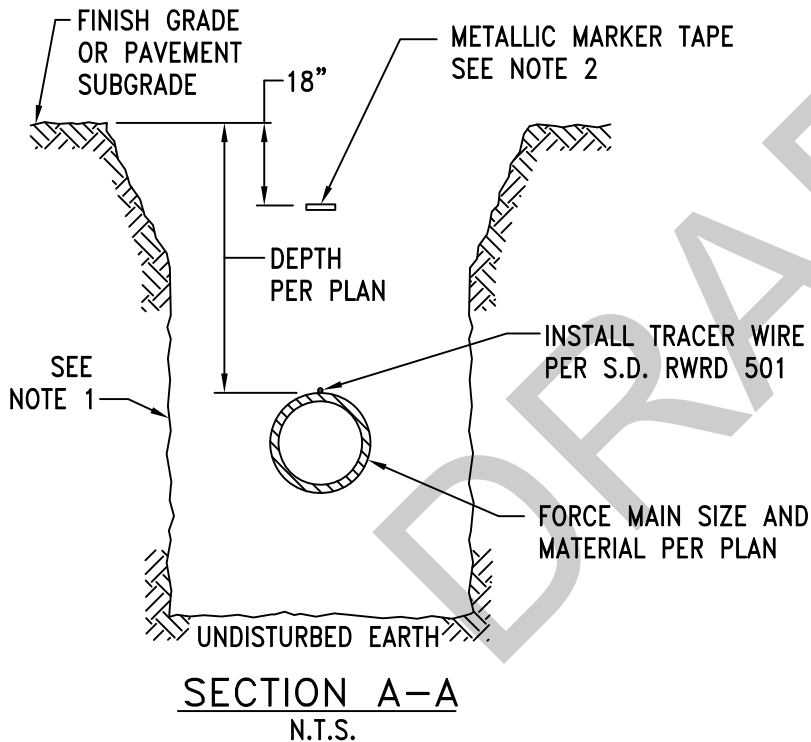
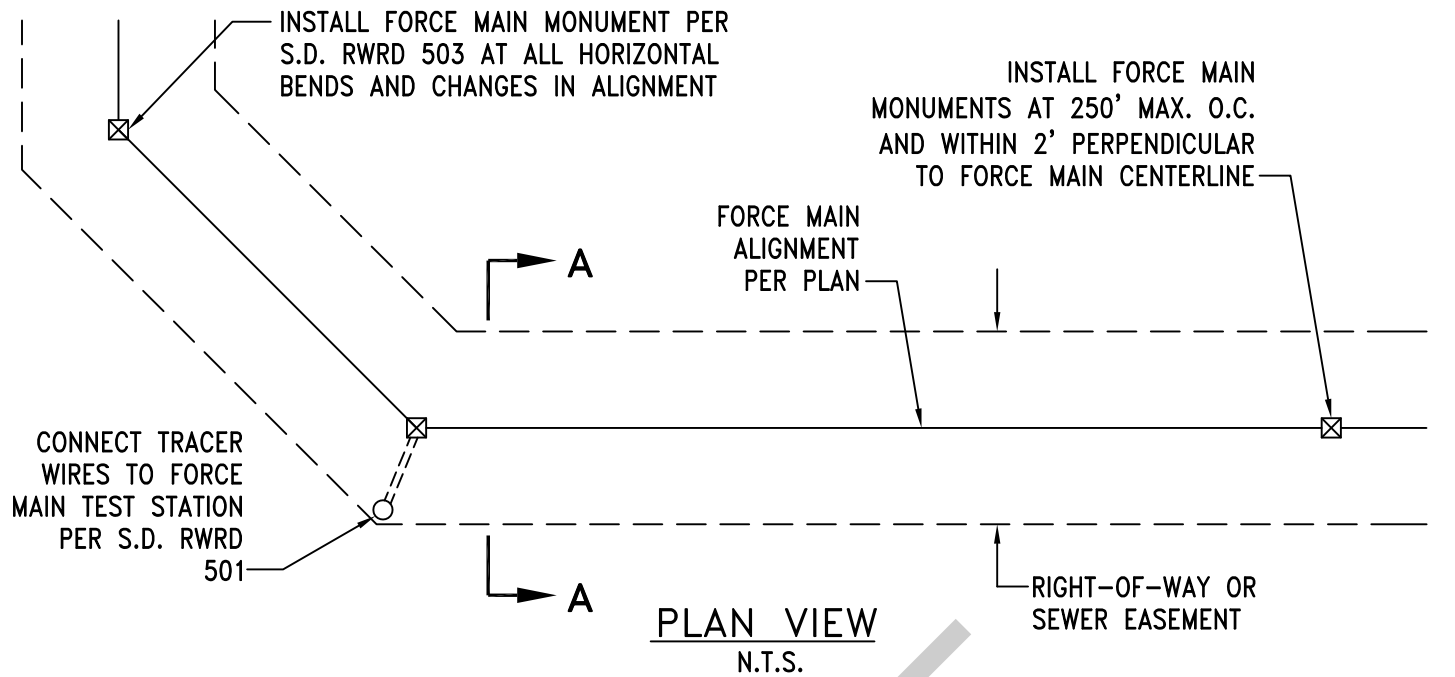
TYPE III

FINAL INSTALLATION FOR UNDEVELOPED LOTS IN UNPAVED AREAS (SEE NOTE 2)
N.T.S.

NOTES

1. BOX AND COVER PER PC/COT STANDARD DETAIL W-300 WITH MODIFIED COVER LABELED "SEWER" UNLESS OTHERWISE APPROVED BY THE FIELD ENGINEER.
2. A COMPLETED MEMORANDUM OF UNDERSTANDING FORM IS REQUIRED TO IDENTIFY OPTION A OR OPTION B FOR TYPE III CLEANOUT RISER INSTALLATIONS. CONTACT THE FIELD ENGINEER FOR THE CURRENT VERSION.
3. SEE SUBSECTION 3.2.3(C) FOR MORE INFORMATION.

ISSUED:	STANDARD DETAIL		DETAIL NO.
12/12	HCS CLEANOUTS		RWRD 404
REVISED:			SHEET 1 OF 1
10/15			

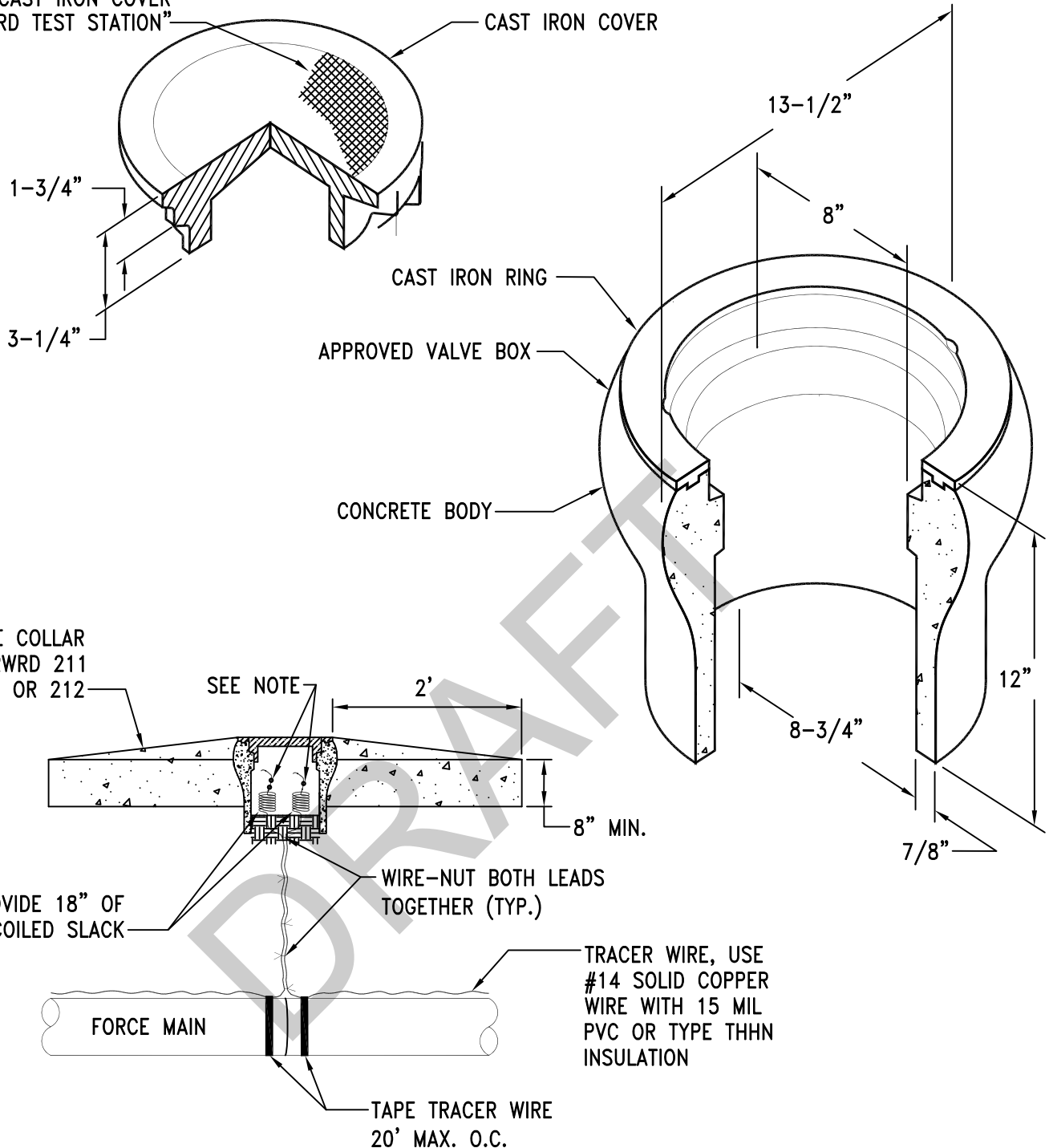


NOTES:

1. TYPICAL TRENCH FOR FORCE MAINS SHALL CONFORM TO THE FLEXIBLE PIPE TRENCH REQUIREMENTS IN S.D. RWRD 104 WITH THE ADDITIONAL MODIFICATIONS AS SHOWN.
2. CONTINUOUS PRINTING ON MARKER TAPE SHALL STATE "CAUTION: SEWAGE FORCE MAIN" UNLESS OTHERWISE APPROVED BY THE FIELD ENGINEER.
3. FOR JOINT INSTALLATIONS WITH GRAVITY SEWER, THE MINIMUM HORIZONTAL CLEARANCE BETWEEN THE FORCE MAIN AND GRAVITY SEWER LINE SHALL NOT RESULT IN HORIZONTAL JOGGING OF THE FORCE MAIN AROUND MANHOLES.
4. SEE SUBSECTION 3.2.3(B)(v) FOR MORE INFORMATION.

ISSUED:	STANDARD DETAIL		DETAIL NO.
8/92 (WWM-504)	TYPICAL TRENCH FOR FORCE MAINS		RWRD 500
REVISED:			SHEET 1 OF 1
12/12			

ARCWELD 1-1/2" LETTERING
ONTO CAST IRON COVER
"PCRWRD TEST STATION"

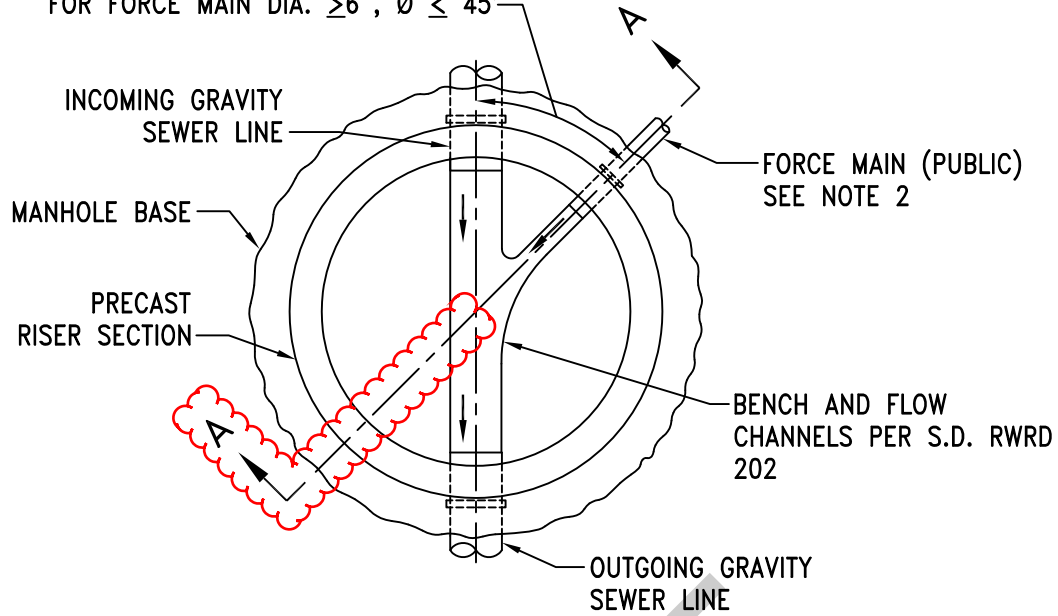


NOTE:

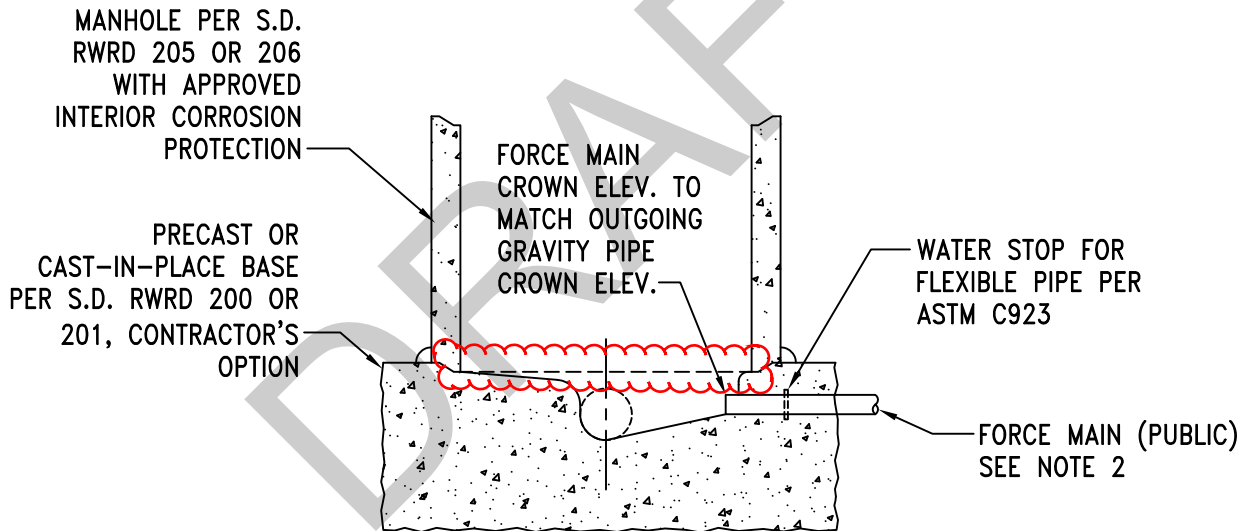
- KNOTS SHALL BE PROVIDED APPROXIMATELY 6" FROM THE END OF LEAD AND AS SUCH:
- ANODE LEAD TO HAVE 2 KNOTS;
 - TRACER WIRE RUNNING NORTHERLY OR EASTERLY TO HAVE ONE KNOT;
 - TRACER WIRE RUNNING SOUTHERLY OR WESTERLY TO HAVE NO KNOTS.

ISSUED:	STANDARD DETAIL		DETAIL NO.
8/92 (WWM-511)	FORCE MAIN TEST STATION		RWRD 501
REVISED:			SHEET 1 OF 1
12/12			

FOR FORCE MAIN DIA. $< 6"$, $\theta \leq 90^\circ$
 FOR FORCE MAIN DIA. $\geq 6"$, $\theta \leq 45^\circ$




PLAN VIEW
N.T.S.

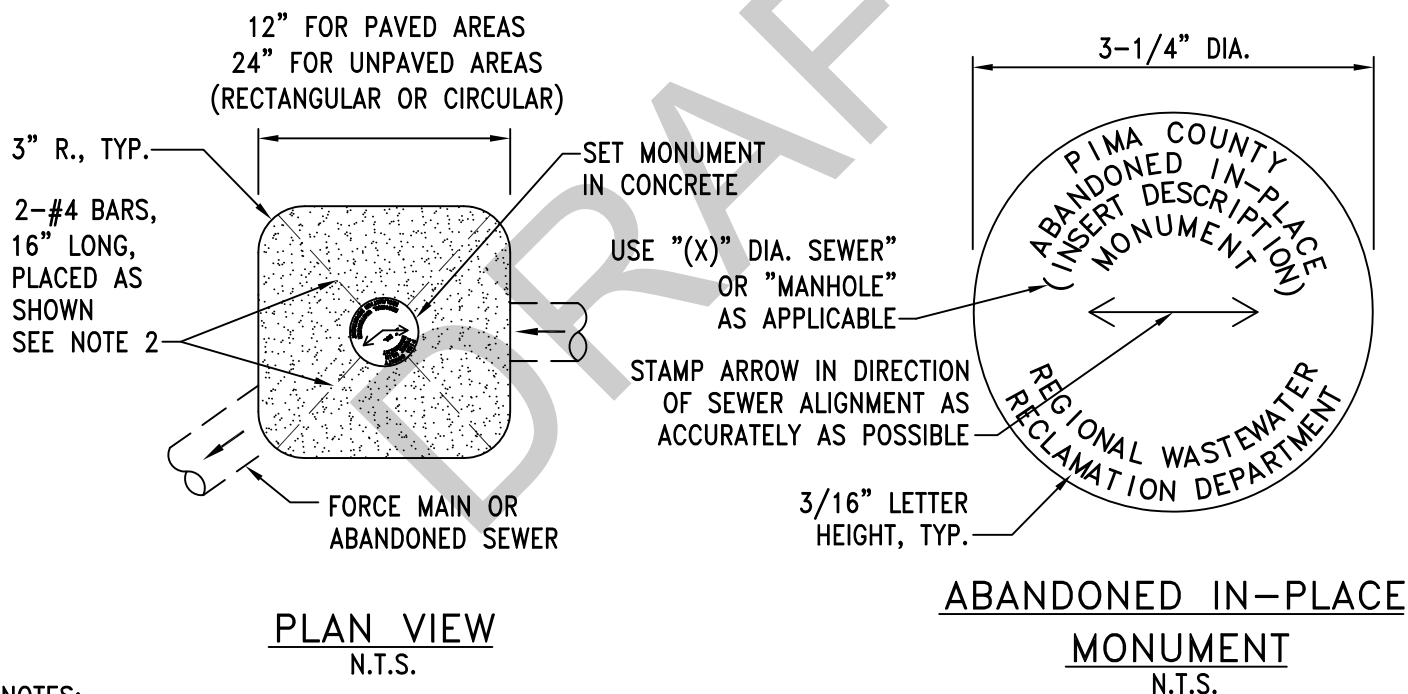
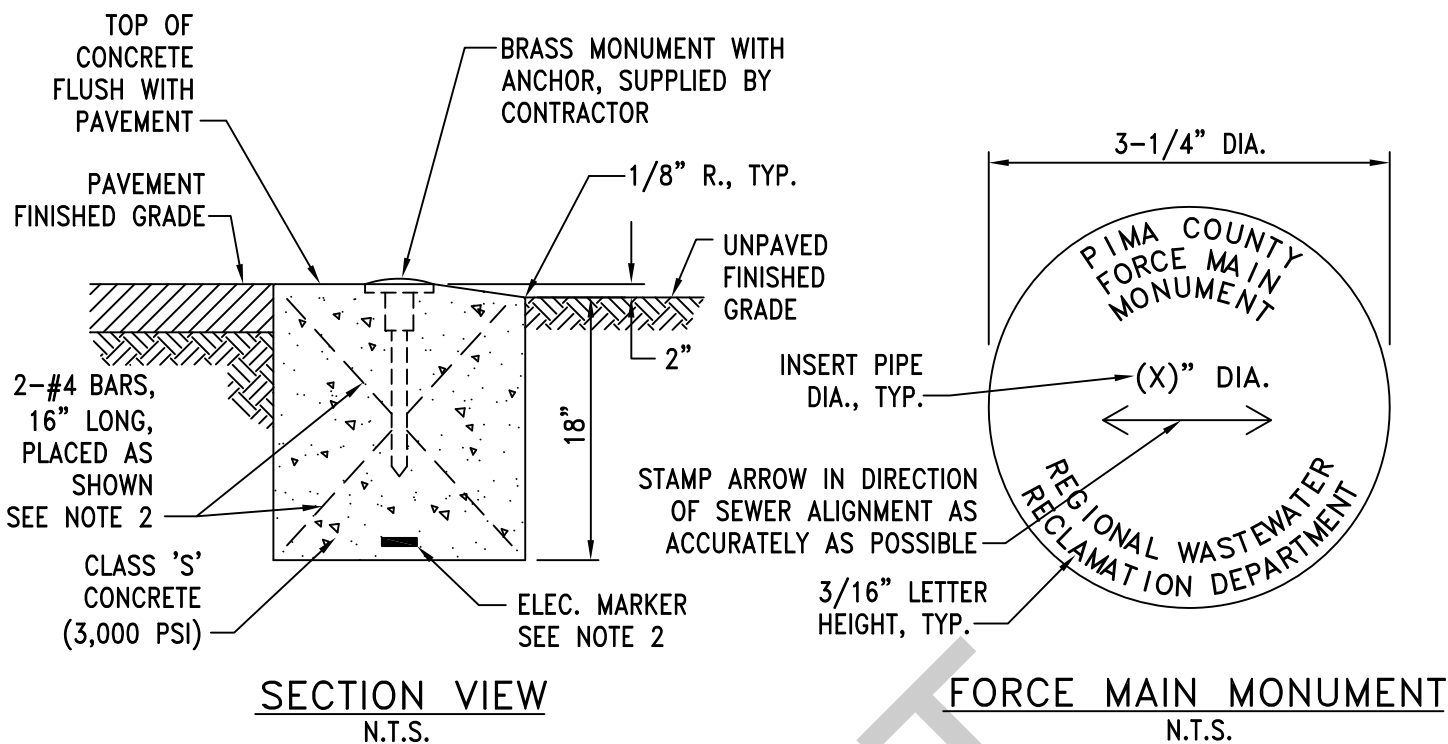


SECTION A-A
N.T.S.

NOTES:


1. FOR TERMINAL MANHOLES, CONNECT THE FORCE MAIN IN THE SAME HORIZONTAL ALIGNMENT AS THE OUTGOING GRAVITY SEWER LINE.
2. THE CONNECTION OF A PRIVATE FORCE MAIN INTO A PUBLIC MANHOLE IS NOT PERMITTED. PRIVATE FORCE MAINS SHALL DISCHARGE INTO A PRIVATE MANHOLE, LOCATED ON PRIVATE PROPERTY. THE PRIVATE MANHOLE SHALL CONNECT TO A DOWNSTREAM PUBLIC MANHOLE WITH A PRIVATE GRAVITY SEWER LINE.

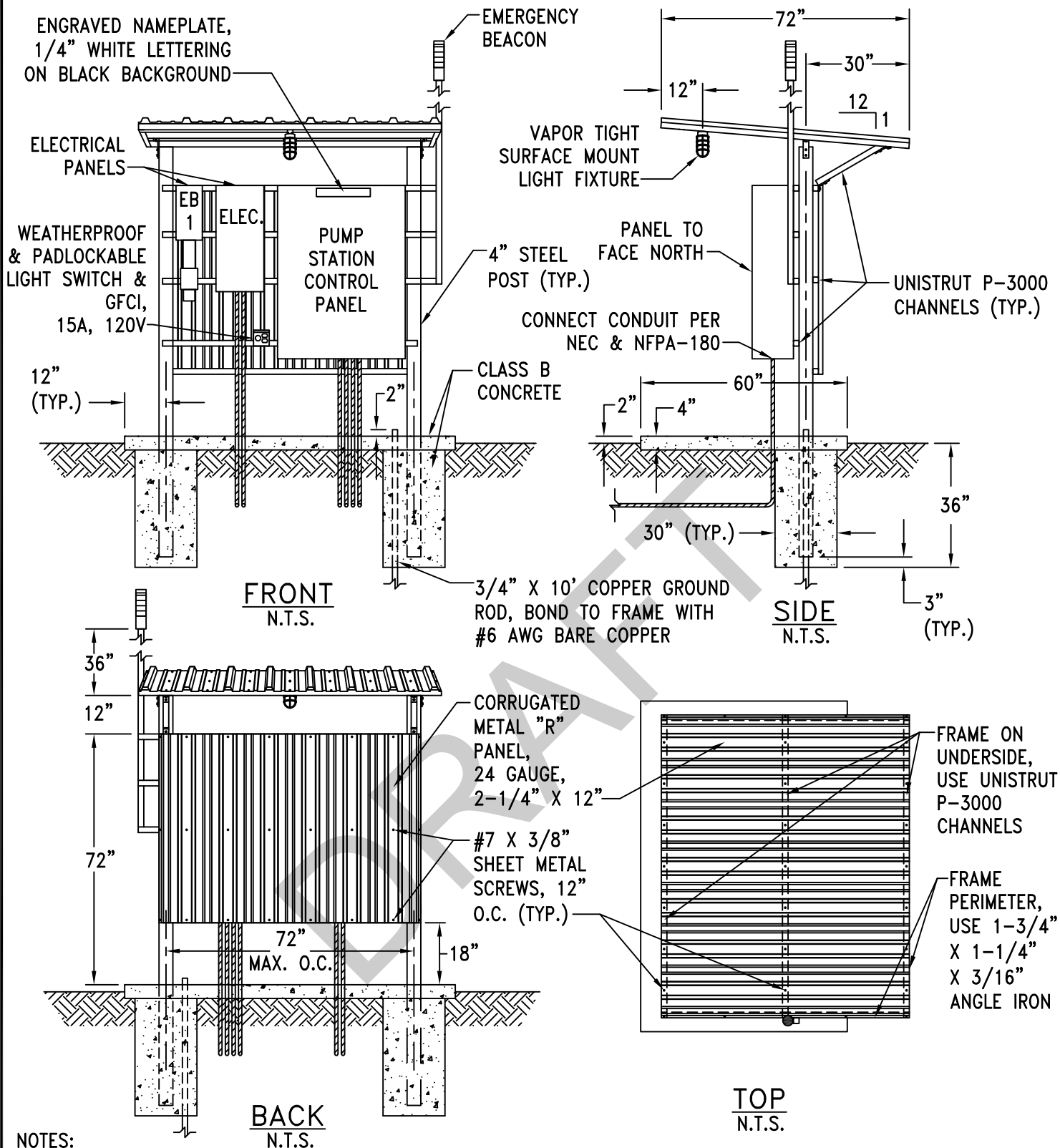
ISSUED:	STANDARD DETAIL FORCE MAIN CONNECTION TO MANHOLE	 PIMA COUNTY WASTEWATER RECLAMATION	DETAIL NO.
8/92 (WWM-505)			RWRD 502
REVISED:			
10/15			SHEET 1 OF 1



NOTES:


1. MONUMENT DATA SHALL BE AS SHOWN, WITH THE EXCEPTION OF THE NOTATION IN PARENTHESIS TO BE MODIFIED AS NOTED.
2. REINFORCING BARS MAY BE DELETED WITH THE INSTALLATION OF AN APPROVED ELECTRONIC MARKER SYSTEM PLACED AT THE BASE OF THE MONUMENT AS SHOWN.
3. ABANDONMENT MONUMENTS SHALL BE PLACED AT THE TERMINAL ENDS OF ABANDONED SEWER LINES/FORCE MAINS WITH A MAXIMUM SPACING OF 250' AND CENTERED ABOVE ABANDONED MANHOLES.

ISSUED:	STANDARD DETAIL		DETAIL NO.
8/92 (WWW-507/508)	FORCE MAIN AND		RWRD 503
REVISED:	ABANDONMENT MONUMENTS		SHEET 1 OF 1
12/12			



NOTES:

1. PAINT EXPOSED METAL WITH #1 ALKYD PRIMER & #2 ALKYD WHITE (1 COAT EA.) PER 2003 COT/PC SS 1002.
2. EQUIPMENT MAY BE RECONFIGURED TO MEET JURISDICTIONAL AGENCY AND MANUFACTURER'S REQUIREMENTS. INSTALL ADDITIONAL SUPPORT POST(S) AS NEEDED AT 72" MAX. O.C. FOR ADDITIONAL PANEL WIDTH.
3. CABINETS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS: UL LISTED, NEC COMPLIANT, DEAD FRONT SAFETY TYPE, COPPER BUS BARS WITH FULL NEUTRAL, STEEL CABINET WITHOUT KNOCKOUTS AND PADLOCKABLE.

ISSUED:	STANDARD DETAIL		DETAIL NO.
8/92 (WWM-510)			RWRD 504
REVISED:			
12/12			
EQUIPMENT SUPPORT AND SHADE STRUCTURE			